DOCUMENT RESUME

ED 039 021 PS 002 882

AUTHOR Allen, James E., Jr.
TITLE Education for Survival.
PUB DATE 23 Jan 70
NOTE 17p.; Paper presented at the annual meeting of the American Council of Learned Societies, Washington, D.C., January 23, 1970

EDRS PRICE EDRS Price MF-$0.25 HC-$0.95
DESCRIPTORS *Ecology, *Educational Objectives, *Environmental Education

ABSTRACT

In this address, James E. Allen, Jr., Assistant Secretary for Education and U.S. Commissioner of Education, discusses the relationship of education to the problem of ecological destruction. He states that the solutions to the problems of air, water, and soil pollution may be found in redirected education. This "education for survival" can serve to replace confusion with knowledge and, thus, be the key to human survival. He maintains that education is more important than environmental legislation, because in a free society it is always the citizens who must bear ultimate responsibility. He asks humanists and social scientists to take the lead in solving our present ecological dilemma. The specific task of the new environmental/ecological education is to instill awareness, concern, motivation, and training at every level of learning. (MH)

ED039021

U. S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

EDUCATION FOR SURVIVAL*

Address by
James E. Allen, Jr.
Assistant Secretary for Education
and
U.S. Commissioner of Education

In the course of the past few weeks we have been treated to every conceivable kind of review of the 60's and prediction for the 70's that hindsight and foresight together could reduce to words.

One of the most troubling things we have learned from this inventory is that our world -- which once we believed would endure for almost anyone's casual definition of "forever" -- is in acute danger of becoming the subject of a premature obituary notice.

As President Nixon said in his State of the Union address yesterday, "The great question of the 70's is shall we surrender to our surroundings or shall we make our peace with nature and begin to make reparations for the damage we have done to our air, to our land, to our water."

If the tragic state of the environment seems a rather inappropriate subject for an address by the United States Commissioner of Education, let me assure you that it is not. Indeed, everything we have been alerted to about the perilous condition of our planet comes under the heading of "education."

Granted, it is an unusual form of education. Instead of learning it as a matter of course from our earliest classrooms on through the

PS 002882

---

*Before 1970 Annual Meeting of the American Council of Learned Societies, Mayflower Hotel, Washington, D.C., Friday, January 23, 1970, 7:30 p.m.

educational process, we are having it sledgehammered into our heads rudely and with little warning. It is education nonetheless, and in the light of history, it may prove to have been the most valuable we have ever been exposed to.

Though this may seem at first to be education for catastrophe, it can also provide the catalyst for creating education for survival. For the human species, all of whom share a steadily worsening environment, there can be no more important consideration.

At the outset, let me say this: there is nothing whatever that is remotely political or even partisan in what I am saying to you tonight. The environmental deterioration in which we find ourselves knows neither Republican nor Democrat, white or black, rich or poor, young or old. To experience it, to suffer from it, to be concerned with it, to be committed to do something about it -- all that is required is that you be alive. All else is quite literally irrelevant.

The plain fact is that the technology of living that we have created has gotten -- we hope, only temporarily -- out of control. Our mere existence is creating dangerous changes in the delicate balances by which we have thus far survived on earth. Our technology has so far been used primarily in ways which aggravate these changes. Only now are we learning how to measure the changes we know about -- and to be wary of the subtle long-range changes of which we are not yet even aware.

I need not belabor you with statistics. You have read them, and heard them, and flinched at them, and perhaps wearied of them.

Who, after all, can really visualize 142 million tons of pollutants discharged into the air of this country every year?

What does it really mean to say that $20 billion is the estimated cost of the havoc wrought annually by these pollutants?

Eight million junked automobiles, 26 billion discarded bottles and 48 billion cans, 150 million tons of solid wastes, 2,100 communities dumping billions of gallons of raw sewage into our waterways -- these are statistics that boggle the mind, and they are repeated like clockwork every year, inching higher and higher toward the point that reads "human extermination." It takes something really different -- like a river so filthy it actually catches fire -- to engage our jaded attention.

We created this technology by exploiting our talent for invention, our dedication to learning, and willingness to work and work hard. Now we face the ultimate challenge of using these same national characteristics to regain control of our technology -- lest uncontrolled it exterminates us.

The time we have to achieve this reversal may be no longer than the few years remaining in this century. In any event, there is no time to lose. <u>The key to human survival is education</u>.

Why do I say that education is the key to survival? Why not new laws? Why not new rules and regulations and codes and all the rest

of the complex apparatus of government which regulates nearly all human endeavor? Why is education more important than all of these admittedly important measures?

The answer is that in a free society it is always the citizen who must bear the ultimate responsibility for the choices that are made and the actions that are taken. In all our history we have found no better way than through the process of education for equipping citizens -- you and me and our children -- with the knowledge and the understanding needed to make these choices and to take these actions.

What we desperately need is not ingenious tinkering with the surface of our culture but a new vision of the possibilities of human life in our age. To whom should we turn for such a vision, and who can persuade our citizens to pay the price for carrying it to fruition?

Not so long ago, many people were confident that science could solve such problems, but such confidence is no longer as pervasive as it used to be. The scientists themselves are frequently known to express pessimism. All of the threats to human existence ironically derive, to a greater or lesser degree, from the extraordinary flowering of science-based technology in the twentieth century. That this flowering has brought many benefits to man, few will deny. That it also extends his power beyond his demonstrated wisdom to use it to his collective advantage is also hard to deny. There is growing conviction in this country that science is

now too portent-laden to be left to scientists alone. In this regard, I am reminded of the prophetic words of Lord Snow in his book, Two Cultures, some years back.

It is at this point -- at the last milisecond before midnight -- that the humanist and social scientist are being invited to help salvage our society. It is ironic because, like Churchill under the clock in Parliament thundering unheeded warnings of disaster prior to World War II, the social scholars have long predicted the state of affairs to which we have come. Yet like Churchill, they must now assume a major responsibility for averting the impending doom.

There is only one way to do so, and that is to reassert the primacy of a man-centered culture which subordinates technology to the human condition. That is what the new national environment policy is really all about -- a Renaissance of Man in the decade of the 70's.

This Renaissance takes as its paramount issue the quality of life. And who is better equipped to speak on the quality of human existence than the man of humane letters and social concerns? Who else has devoted his life to the most productive and liberating ways of approaching the human condition? I charge each of you with the burden of leadership, of speaking to the creation of exemplary men.

In this regard, I cite Classics Professor William Arrowsmith of the University of Texas whose views on education should constitute a statement of goals for us all:

PS 002882

> "It is men we need now, not programs. It is possible for a student to go from kindergarten to graduate school without ever encountering a man -- a man who might for the first time give him the only profound motivation for learning, the hope of becoming a better man. Since the humanities aim at humanization, their meaning and end are always, I believe, an exemplary man. Hence the humanities stand or fall according to the human size of the man who professes them."

It is clear, then, that scientists are not alone responsible for the woes of our civilization. Humanists and social scientists by their indifference must share with other citizens some responsibility for the current state of our world too. But the times are now suddenly ripe for a fruitful intercourse between the humanities and the sciences. The surge in inter-disciplinary team research and study represented by the concern for ecology constitutes a major opportunity for an impact upon public policy by the humanities and social sciences.

A major thrust will be made through the agency of education. I hope that you will not neglect the challenge presented to you to participate in the reorientation of American education toward man-centered environmental study. The newly awakened social conscience in our country demands a response by educational authorities. We ask that you join us in shaping an educational policy consonant with that Renaissance.

The responsibility of the government is to lead.

That is why the President, on January 1, 1970, marked the start of a new decade by signing the bill establishing a Council of Environmental Advisors. It is why he said, "The 1970's absolutely must be the years when America pays its debt to the past by reclaiming the purity of its

air, its waters and our living environment. It is literally now or never." It is why he has dedicated this Administration to the saving of our fragile, threatened environment -- on which our survival depends.

It is also the responsibility of government to set an example -- to encourage the growth of public understanding of its activities, of public concern, of public participation. "Until he has been part of a cause larger than himself, no man is truly whole," the President said in his inaugural address.

Above all, it is the responsibility of all government -- not just national or state, but every local unit that operates a public school system -- to educate. . . to replace confusion with knowledge. . . to replace concern with commitment and action.

It is at this point that the humanists and the social scientists should be "doing their thing." The problems we have are not just scientific. They are social and they bear directly upon human interaction with the total environment. What we need desperately from the cognoscenti such as you here tonight is help in posing the right questions. If the growing surge of citizen concern is to give rise to new human survival techniques and attitudes, a leadership role for the humanities is essential.

Learning about environment and ecology and all that affect it is admittedly complicated. Even today, when we know how dangerously threatened our environment is, we have only a small corps of qualified professionals to call upon. But if government at any level should take the

attitude that this is all too complicated for the average citizen to understand -- that he is needed merely to pick up the bill -- then we shall be inviting public apathy, and even the most ambitious programs will eventually fail.

We simply cannot afford failure.

We must therefore begin immediately to use our full educational capability to learn as much as we can, as fast as we can, about how to save our environment. At the same time, we must begin to teach not just one but two generations of Americans, simultaneously, all that they must know in order to revive the earth on which we live.

Why do I say two generations? Simply because you and I and every other adult American must learn all this, just as must every American whose age puts him in the student population. We must learn it so we can understand it -- and we must learn it in order to be able to teach it on a vastly greater scale than anything we have so far envisioned.

The teacher we intend to send into our public schools in 1980 is today a sixth grader somewhere in America. He or she must be taught -- beginning right now -- along with every American boy and girl, about environmental quality, about ecology and about all of the complex and interacting elements that go to make them up.

We and they must learn together -- and in the spare time we have left, we must begin to write the textbooks for this new educational enterprise. We must think about America as it will be in 1980 -- a

nation with some 235 million citizens with different kinds of schools and different kinds of teaching and learning programs, and we must do this right now. That future teacher will enter college in 1976 and textbooks will have to have been written and published, courses mapped out and instructors trained in these new disciplines.

When we turn these brand-new teachers loose in 1980, they had better know much more than any of us do right now about the problems involved in human survival -- or else the war may well be lost, although the battles may go on for a few decades longer.

What are the specific tasks to be assigned to this new environmental/ecological education? They can be summed up briefly: awareness, concern, motivation and training:

Awareness of how we and our technology affect and are affected by our environment;

Concern for man's new and unique responsibility to re-establish and to create beneficially balanced relationships among all forms of life within the closed earth system;

Motivation and training to enable us to acquire and spread the knowledge and skills that will help us solve interrelated environmental problems and prevent their future occurrence.

The end product of this kind of education -- and it must take place at every level of the educational enterprise -- will be to create,

within the decade that has just begun, a citizenry with a clear understanding that man is an inseparable part of the system and that, as such, his continued existence is totally dependent on its continued functioning.

Departments devoted to the environmental sciences are being started at many of our nation's universities. This is an excellent beginning -- but we must also begin now to develop similarly oriented programs in our grade schools, in our high schools and in our junior colleges. It is essential for students reaching the university level -- and just as urgent for those whose education will not take them that far -- that they already know the basic facts about environment just as you and I learned addition and subtraction.

These same basic courses must be developed and put into action at every stage of adult education. Logically, this should include not only adult education sponsored by formal school systems, but also the educational enterprises conducted by business and industry, by unions and by other organized groups. The future of society lies in its ability to react and respond to situations and events -- and we are in a situation with regard to our environmental preservation that calls for a clear and vigorous response by every sector of American life. Eventually, as we gain ground, we should become able to act rather than merely react.

It is a matter of urgent necessity that we develop in both young and old an understanding of the society in which they live -- an increasingly urbanized society with all the problems that this creates. We need to develop ecological studies designed to make everyone aware of the fragile and interacting relationships of land, air and water -- and to give new understandings of the eco-concepts -- that must govern the development of society, encompassing the demands of increasing urbanization.

We need in our schools to counteract the idea of environment as being something "out there" that can be visited and then left behind at the end of the field trip. Our goal must be to see that every school has access to an environmental study area where youngsters of all ages can grow up with the concept of environment as being everything that makes up their world, and with an understanding of the interdependency of all its numberless elements.

Through the development of EEE -- environmental/ecological education -- at every level of learning, I see some very exciting things:

-- Pre-schoolers will be using the out-of-doors as a classroom -- for it is a matter of urgent necessity that our children early begin to understand their environment.

-- High school students will use civics courses to engage in work-study programs with city planners and environmental quality

professionals. They will focus on all sorts of urban problems to which solutions must be found -- waste disposal, water supply, pollution and population.

-- Undergraduates will participate in multi-disciplinary classes under the guidance of master teaching teams to allow them to work out the great intellectual synthesis of the 1970's -- the newly emerging coalescence of the humanities, the natural and social sciences, and the broad-based environmental studies that are being undertaken.

-- Graduate students will work in special study programs directed to creating new and different approaches to solving ecological problems.

-- Teachers will be given opportunities to acquire the knowledge and the methods of teaching EEE.

-- Out-of-school adults will learn to understand how and why the ecology and the environment interact; and while the professionals and the para-professionals work toward finding the immediate solutions we must have, all of us will acquire the kind of knowledge we can no longer do without. The entire level of mass citizen understanding and participation must be raised if we are to reverse the environmental skid. In this effort, we must rely on educational television, on community

colleges, on business, on labor -- in fact, on a total fusion of individual and group effort.

If our communications do not fail us in this crisis, ALL AMERICANS WILL, TO SOME DEGREE, BECOME ECO-ACTIVISTS.

Let me illustrate what this can mean.

In California, voters in San Bernardino County recently turned down a proposed coal burning plant despite the increased tax revenues it would have contributed. Residents in a Seattle suburb chose to preserve a wooded park area instead of clearing it for a golf course.

A recent example of the effectiveness of the working meld provided by mass communications, citizen response, and various levels of government working in partnership was the halting of the Everglades Jetport. An irreversible ecological tragedy was averted and we lighted a beacon of hope and inspiration for a nation of environmental under-achievers.

The decisions to be made by each of us in the future will be on both small and very large environmental issues, but, whatever their degree, they will be more and more numerous in the years ahead. It is vital that we and our children be equipped with the wisdom and understanding that reject haphazard or emotional choices in favor of informed, reasoned decisions.

Undertaking this vast new educational enterprise will have far reaching and highly beneficial implications for American education. It will be a catalyst whose impact will register in every classroom and, I hope, in every home and office and plant in America.

Scholarship will benefit by the development of the essential inter and cross disciplinary studies that will be needed. The active involvement of our educational system in problems that pervade the lives of all will help to make the educational process more relevant and responsive.

This new emphasis in American education will help to make every individual more aware of how dependent each of us is upon the other. We shall -- we must -- learn that in the highly complex structure which is human society, survival depends on self-control (which includes control of technology -- that mammoth extension of "self.")

The simple goal of all this educational effort is the realization that the acts of one react on all. If we can learn this lesson, we shall live in a better society. If we do not learn it, we may well have no society at all.

What is the Office of Education going to do to help American education implement the environmental challenge outlined by the President and alluded to here today? A number of things:

-- Promote EEE as a major activity of the Office in the 1970's.

-- Set up a special environmental studies staff to coordinate existing programs, redirect existing resources, and plan new programs and activities. This can be done by drawing creatively on all the relevant resources in O.E., without creating another bureaucratic unit.

-- Support appropriate legislation for Federal initiatives in environmental education.

-- Call a major conference in June on the challenge of EEE to the American educational community.

-- Support wholeheartedly the Environmental Teach-In scheduled nationally for April 22. I urge all American educators, at elementary, secondary and higher levels throughout the nation, to concern themselves with this effort and to give this environmental event the impact it deserves.

-- Propose that teachers follow up the National Teach-In by organizing and planning regional Ecological Environmental Teach-Ins for Teachers in the Summer of 1970. The Office of Education and the Department of Interior would assist these efforts in cooperation with State and local groups and organizations.

-- Cooperate with the Department of Interior to put to the highest educational use the cultural and natural environmental resources of the National Park Service. The Department of Interior's National

Environmental Education Landmark program represents a major step in the direction that education for survival must take.

-- And finally, begin to plan for our participation in the 1972 UN International Environmental Year. Since we are the leading industrial nation, we must take leadership in countering industrial violence to the environment. The spread of our industrial technology has brought with it the spread of its rot. As John Gardner recently said: "The problems of nuclear warfare, of population, or the environment are impending planetary disasters. We are in trouble as a species."

Before us stands a great challenge. Arnold Toynbee has told us that the essence of the story of mankind and the survival of civilizations is to be found in the cycle of challenge and response. Those that respond survive; those that do not decline and die.

I believe America contains the seeds of response. Some are disturbed by the enormity of the challenge -- but the very fact that we are willing and anxious to focus on our environmental problems is the best assurance that we do indeed still possess the energy to tackle them and the ability to forge the tools to conquer them.

In just six years, this nation will enter upon its third century of independence. How our children and their children will live in that century -- or even if they will -- is almost totally dependent on the

commitment we must now make and the dedication with which we carry it out.

If we are committed and steadfast, then we can in good time step aside and make room for the future, with the reassurance that we have kept the faith. . . that in the brief but eloquent words of Ecclesiastes:

"One generation passeth away and another generation cometh, but the Earth abideth forever."